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Reviewer: Durreshwar Anjum

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Application No: 10501127 Version No: 5.0

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Finished: 2008-10-08 15:50:14.451

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<110> Willemssen, Petrus T.J.  
Westerveen, Sjoukje F  
Bakker, Douwe  
van Zijderveld, Fred G  
Thole, Jelle E.R.

<120> Paramycobacterial diagnostics and vaccines

<130> P54977US00

<140> 10501127

<141> 2004-09-10

<150> PCT/NL03/00020

<151> 2003-01-13

<150> EP 02075089.9

<151> 2002-01-11

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Val Pro Asn Arg Arg Arg Arg Lys Leu Ser Thr Ala

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atg agc gcg gtc gcc gcc ctg gca gtg gcg agt cct tgc gca tac ttc 217

Met Ser Ala Val Ala Ala Leu Ala Val Ala Ser Pro Cys Ala Tyr Phe

15 20 25

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Leu Val Tyr Glu Ser Thr Ala Gly Asn Lys Ala Pro Glu His His Glu

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Phe Lys Gln Ala Ala Val Met Ser Asp Leu Pro Gly Glu Leu Met Gly

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Ala Leu Ser Gln Gly Leu Ser Gln Phe Gly Ile Asn Leu Pro Pro Val	
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ccc gcc ctg agc ggc ggc gcc acc agc act ccc ggt ctg gcc agc ccc	409
Pro Ala Leu Ser Gly Gly Ala Thr Ser Thr Pro Gly Leu Ala Ser Pro	
80 85 90	
ggc ctg ggt agc ccc ggc ctg ggc acg ccc ggc ctg gga acg ccg ggc	457
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Thr Ser Pro Gly Leu Thr Ser Pro Gly Leu Thr Ser Pro Gly Leu Thr	
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Leu Pro Thr Thr Pro Gly Gly Gly Val Ala Thr Pro Gly Ala Gly Leu	
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175 180 185	
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Pro Gly Leu Gly Ser Pro Thr Val Ala Pro Ser Glu Val Pro Ile Asp	
190 195 200	
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Ser Gly Ala Gly Leu Asp Pro Gly Ala Gly Gly Thr Tyr Pro Ile Leu	
205 210 215 220	
ggc gac ccg tcg acc ttc ggt aac gcc tcg ccg atc ggc ggc ggt ggc	841
Gly Asp Pro Ser Thr Phe Gly Asn Ala Ser Pro Ile Gly Gly Gly Gly	
225 230 235	
acc ggt ctg ggc ggc ggc tcg agc tcg ggt ggc agc ggc ggc ctg gtc	889
Thr Gly Leu Gly Gly Gly Ser Ser Ser Gly Gly Ser Gly Gly Leu Val	
240 245 250	
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Asn Asp Val Met Gln Ala Ala Asn Gln Leu Gly Ala Gly Gln Ala Ile	
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Asp Leu Leu Lys Gly Leu Val Met Pro Ala Ile Thr Gln Gly Met His	
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35 40 45

Ala Val Met Ser Asp Leu Pro Gly Glu Leu Met Gly Ala Leu Ser Gln  
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115 120 125

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130 135 140

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165 170 175

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180 185 190

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195 200 205

Leu Asp Pro Gly Ala Gly Gly Thr Tyr Pro Ile Leu Gly Asp Pro Ser  
210 215 220

Thr Phe Gly Asn Ala Ser Pro Ile Gly Gly Gly Gly Thr Gly Leu Gly  
225 230 235 240

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245 250 255

Gln Ala Ala Asn Gln Leu Gly Ala Gly Gln Ala Ile Asp Leu Leu Lys  
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Gly Leu Val Met Pro Ala Ile Thr Gln Gly Met His Gly Gly Ala Ala  
275 280 285

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Ala Phe Ala Val Ala Leu Leu Leu Gly Leu Gly Asp Val Pro Arg Ala
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gcg gcc acc gac gac cgc ctg caa ttc acc gcg acc acg ctc agc ggc      204
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gcg ccg ttc aac ggc gcc agt ctg cag ggc aag ccc gcc gtg ctg tgg      252
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Phe Trp Thr Pro Trp Cys Pro Tyr Cys Asn Ala Glu Ala Pro Gly Val
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Ser Arg Val Ala Ala Ala Asn Pro Gly Val Thr Phe Val Gly Val Ala
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gcc cac tcc gaa gtc ggc gcc atg gcc aac ttc gtc tcc aag tac aac      396
Ala His Ser Glu Val Gly Ala Met Ala Asn Phe Val Ser Lys Tyr Asn
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ctg aac ttc acc acg ctc aac gac gcc gac ggc gcg atc tgg gcc cgc      444
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tac ggc gtg ccc tgg cag ccc gcg tac gtg ttc tac cgg gcg gac ggc      492
Tyr Gly Val Pro Trp Gln Pro Ala Tyr Val Phe Tyr Arg Ala Asp Gly
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agc tcc acc ttc gtc aac aac ccc acc tcg gcg atg ccc cag gac gaa      540
Ser Ser Thr Phe Val Asn Asn Pro Thr Ser Ala Met Pro Gln Asp Glu
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35 40 45

Phe Asn Gly Ala Ser Leu Gln Gly Lys Pro Ala Val Leu Trp Phe Trp  
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Thr Pro Trp Cys Pro Tyr Cys Asn Ala Glu Ala Pro Gly Val Ser Arg  
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Val Ala Ala Ala Asn Pro Gly Val Thr Phe Val Gly Val Ala Ala His  
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Ser Glu Val Gly Ala Met Ala Asn Phe Val Ser Lys Tyr Asn Leu Asn  
100 105 110

Phe Thr Thr Leu Asn Asp Ala Asp Gly Ala Ile Trp Ala Arg Tyr Gly  
115 120 125

Val Pro Trp Gln Pro Ala Tyr Val Phe Tyr Arg Ala Asp Gly Ser Ser  
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aac tac ggg cag gtg atc gcc gcg ctg aac gcg tcc gac ccg gcg gct 198  
Asn Tyr Gly Gln Val Ile Ala Ala Leu Asn Ala Ser Asp Pro Ala Ala  
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Ala Gln Gln Leu Asn Ser Ser Pro Met Ala Gln Ser Tyr Ile Gln Arg  
60 65 70

ttc ctg gcc tcc ccg ccg gcg aag cgt cag cag atg gcc cag cag atc 294  
Phe Leu Ala Ser Pro Pro Ala Lys Arg Gln Gln Met Ala Gln Gln Ile  
75 80 85

cag ggc atg ccg gcc gcg cag cag tac atc aac gac atc aac cag gtc 342  
Gln Gly Met Pro Ala Ala Gln Gln Tyr Ile Asn Asp Ile Asn Gln Val  
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Asn Ala Ser Asp Pro Ala Ala Ala Gln Gln Leu Asn Ser Ser Pro Met  
50 55 60

Ala Gln Ser Tyr Ile Gln Arg Phe Leu Ala Ser Pro Pro Ala Lys Arg  
65 70 75 80

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Val Ser Ser Asp Leu Phe Ser Gln Ile Val Asn Ser Gly Pro Gly Ser  
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Phe Leu Ala Lys Gln Leu Gly Val Pro Gln Pro Glu Thr Leu Arg Arg  
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Tyr Arg Pro Gly Asp Pro Pro Leu Ala Gly Ser Leu Leu Ile Gly Gly  
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Glu Gly Arg Val Val Glu Pro Leu Arg Ala Ala Leu Ala Lys Asp Tyr  
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Asp Leu Val Gly Asn Asn Leu Gly Gly Arg Trp Ala Asp Arg Phe Gly  
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Gly Leu Val Phe Asp Ala Thr Gly Ile Thr Thr Pro Glu Gly Leu Lys  
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Gly Leu Tyr Glu Phe Phe Thr Pro Leu Leu Arg Asn Leu Gly His Cys  
105 110 115

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Ala Arg Val Val Val Val Gly Thr Thr Pro Asp Ala Ala Ala Gly Pro  
120 125 130

cac gag cgg atc gcc cag cgc gcc ctg gag ggc ttc acc cgg t